

Identity of *Goodyera shixingensis* (Orchidaceae)

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Abstract After observing the floral characters of living plants and herbarium specimens of *Goodyera yangmeishanensis* T. P. Lin, we found the variation range of those species covered that of *G. shixingensis* K. Y. Lang. Checking the holotype and isotype of *G. shixingensis* confirmed our observation. The name of *G. shixingensis* is thus reduced as a synonym of *G. yangmeishanensis*.

Key words Orchidaceae, *Goodyera yangmeishanensis*, *Goodyera shixingensis*, new synonym.

Goodyera shixingensis K. Y. Lang was established in 1996, and it was similar to *G. yangmeishanensis* T. P. Lin, but distinguished by some characters, e.g. margins of bracts entire, inflorescence densely haired, lateral petals ovate-lanceolate with apex acute and with longitudinal 1-carina at the apex of the dorsal costa (Lang, 1996, 1999).

During our investigation on the orchid species diversity in Nanling National Nature Reserve, north Guangdong, we found *G. yangmeishanensis*. It was characterized by the white reticulate or centrally discolored leaves, hairy peduncle and small flowers, of which the petals and lip apexes were denticulate. We also noticed that the margins of bracts varied heavily, from nearly entire to basal denticulate, and even in the same individual the bracts at lower part of the peduncle are basal denticulate but entire at the upper part. Moreover, the lateral sepals were slightly carinate and obtuse or somewhat acute at the apex, and the carinar became more conspicuous at the specimens. Specimens preserved in IBSC also showed the same features as we observed. These features included those of *G. shixingensis*, which was similar to *G. yangmeishanensis*.

At the same time, we examined the holotype (PE) and isotype (IBSC) of *G. shixingensis*, and found that their features described by the collector on the type, e. g. leaves with atrovirens (nearly dark) adaxial surface with some flavicant nitid reticulums, green costa and rosy abaxial surface, while damask-like flowers and their stalks being aqua, were all coincident with those of the fresh materials of *G. yangmeishanensis* in the field. The holotype showed that the bracts were nearly entire, and ovate-lanceolate lateral sepals were with somewhat acute and carinate apex, but the isotype showed that bract bases were serrulate, and lateral sepals were with obtuse apex. These features were all within the range of morphological variations of *G. yangmeishanensis*.

Since *G. yangmeishanensis* possesses the priority to *G. shixingensis* according to the International Code of Botanical Nomenclature (McNeill et al., 2006), the later name should be treated as the former's synonym.

Goodyera yangmeishanensis T. P. Lin in Nat. Orch. Taiwan 2: 173, Col. pls. 80, 81. 1977; C. S. Leou in Editorial Committee of the Flora of Taiwan. Second Edition, Dept. Bot., NTU. Fl. Taiwan, 2 ed, 5: 919. 2000. Type: China. Taiwan (台湾): Miaoli (苗栗), Mt. Yangmei (杨

梅山), alt. 1000 m, 1975-08-20, *T. P. Lin* (林讚标) 185 (holotype, TAIF).

Goodyera shixingensis K. Y. Lang in Acta Phytotax. Sin. 34: 636, fig. 2. 1996, syn. nov. Type: China. Guangdong (广东): Shixing (始兴), Luotian (罗田), alt. 300 m, shaded and damp places in forests or beside valleys, 1958-08-04, *L. Teng* (邓良) 7004 (holotype, PE!; isotype, IBSC!).

Goodyera yangmeishanensis is distributed in Taiwan, Hong Kong (Tang, 2002), Guangdong, and Hunan (New to Hunan).

Additional specimens examined:

China. Guangdong (广东): Ruyuan (乳源), Xinqiao Shan (新桥山), 1956-11-28, C. Wang (黄志) 42656 (IBSC); Wuzhishan (五指山), Nanling National Nature Reserve (南岭国家级自然保护区), 2004-08-06, H. Z. Tian & C. H. Li (田怀珍, 黎昌汉) 4 (IBSC), 2006-08-13, H. Z. Tian & S. Y. Liu (田怀珍, 刘松运) 561 (IBSC). **Hunan** (湖南): Mang Shan (莽山), Pingkeng (坪坑), 1964-09-23, M. X. Huang (黄茂先) 112719 (IBSC); Yizhang (宜章), Liyuanbao (栗源堡), Jinyangzhai (金阳寨), 1942-08-07, S. C. Chen (陈少卿) 2040 (IBSC).

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始兴斑叶兰(兰科)的订正

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摘要 通过仔细研究藏于中国科学院植物研究所标本馆(PE)以及中国科学院华南植物园标本馆(IBSC)的始兴斑叶兰*Goodyera shixingensis* K. Y. Lang的模式及等模式标本, 并同作者野外观察和采集的小小斑叶兰*G. yangmeishanensis* T. P. Lin的新鲜植物和文献描述以及标本进行比较, 证实始兴斑叶兰应为小小斑叶兰的异名。

关键词 兰科; 小小斑叶兰; 始兴斑叶兰; 新异名